

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITION OF O.I.L. ENERGY CORP. FOR AN ORDER)	
FROM THE SUPERVISOR OF WELLS ESTABLISHING A)	
UNIFORM SPACING PLAN CONSISTENT WITH ORDER)	ORDER NO. 16-2010
NO. (A) 14-9-94 AND COMPULSORY POOLING ALL INTERESTS)	
INTO THE UNIT LOCATED IN KEARNEY TOWNSHIP, ANTRIM)	
COUNTY, MICHIGAN.)	

OPINION AND ORDER

This case involves the Petition of O.I.L. Energy Corp. (Petitioner). The Petitioner proposes to establish a Uniform Spacing Plan (USP) in the stratigraphic interval known as the Antrim Shale Formation and to drill additional wells within the USP. Order No. (A) 14-9-94, as amended, provides for the establishment of USPs for greater flexibility in locating Antrim Shale Formation wells. Since not all of the mineral owners within the proposed USP have agreed to voluntarily pool their interests, the Petitioner seeks an Order of the Supervisor of Wells (Supervisor) designating Petitioner as operator of the USP and requiring compulsory pooling of all tracts and interests within that geographic area for which the owners have not agreed to voluntary pooling.

Jurisdiction

The development of oil and gas in this State is regulated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Michigan Compiled Laws (MCL) 324.61501 *et seq.* The purpose of Part 615 is to ensure the orderly development and production of the oil and gas resources in this State. MCL 324.61502. To that end, the Supervisor may establish drilling units or USPs and compulsorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the compulsory pooling of interests can only be effectuated after an evidentiary hearing. MCL 324.61516(1). The evidentiary hearing is governed by the applicable provisions of the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 *et seq.* See 1996 *Michigan Register* 9, R 324.1203. The evidentiary hearing in this matter was held on November 10, 2010.

FINDINGS OF FACT

Petitioner specifically requests that the Supervisor issue an Order that:

1. Establishes the Kearney 29 USP of approximately 1,454 acres consisting of the following tracts of land in Antrim County, Michigan:
T30N, R7W, Kearney Township
Section 29: Entire, except NE 1/4 of SE 1/4
Section 30: S 1/2 and E 1/2 of NE 1/4
Section 31: NE 1/4
Section 32: N 1/2
2. Names Petitioner as operator of the proposed USP.
3. Pools all tracts and mineral interests within the proposed USP that have not agreed to voluntary pooling.
4. Authorizes Petitioner to recover certain costs and other additional compensation from the parties subject to the compulsory pooling order.
5. Authorizes Petitioner to drill through unleased tracts in the subsurface, subject to obtaining a drilling permit. (Petitioner does not propose conducting any surface operations on unleased tracts.)

The Administrative Law Judge determined that the Notice of Hearing was properly served and published. Two Answers to the Petition were filed. Mr. Rajan S. Krishman and Ms. Shari Ballard-Krishman filed an Answer dated October 25, 2010, but did not appear at the hearing. Ms. Cheryl Brown, Mr. Barry Engel, and Ms. Marcia Braden filed an Answer through counsel dated November 4, 2010. They appeared at the hearing through their attorney, Mr. Maynard F. Newman, and cross examined Petitioner's witnesses. The Supervisor designated the hearing to be an evidentiary hearing pursuant to R 324.1205(1)(b) and directed evidence be presented in the form of oral testimony.

In support of its case, the Petitioner offered the oral testimony of Mr. Brandon McDowell, Landman, and Mr. Timothy Brock, petroleum engineering consultant. Mr. Brock was recognized as an expert in petroleum engineering.

I. Formation of USP

The spacing of wells targeting the Antrim Shale Formation is governed by Order No. (A) 14-9-94, as amended. This Order allows for wells to be developed on a project basis through USPs formed by combining blocks of governmental surveyed quarter-quarter sections of land with one common boundary of approximately 1,320 feet, with allowances being made for the differences in the size and shape of sections as indicated by official governmental survey plats. In addition, a USP shall have a well density within the USP of no less than 80 acres per

well, the distance between bottom hole locations of wells shall be no less than 1,320 feet, and the bottom hole locations of wells no closer than 330 feet from the USP boundary. Under Order No. (A) 14-9-94, as amended, it is presumed that one well will efficiently and economically drain an 80-acre area. The Petitioner's proposed USP is described as set forth in Findings of Fact No. 1 above (Exhibit 7).

Mr. McDowell testified the proposed USP is comprised of quarter-quarter sections of land with one common boundary of 1,320 feet. Mr. Brock testified that all lands are underlain by productive Antrim Shale Formation and will be drained by the wells the Petitioner has drilled and proposes to drill. Mr. Brock also testified that no well bottom hole location will be closer than 330 feet from the USP boundary.

Mr. Brock testified that no wells have, to date, been drilled, completed, and produced on the proposed USP Area. Petitioner proposes to drill six (6) wells within the proposed USP as necessary to reasonably recover the gas to the extent surface locations, pipeline locations, and access roads can be secured. At present, Petitioner proposes to drill six (6) wells within two (2) years. Under no circumstances will well density in the proposed 1,454-acre USP be less than 80-acres per well.

Both Mr. McDowell and Mr. Brock testified as to the presence of unleased acreage scattered randomly throughout the USP Area. They observed that the scattered unleased acreage makes it difficult to locate well sites, access roads, and gathering pipelines. Both Mr. McDowell and Mr. Brock testified that the combination of scattered unleased acreage, together with leased acreage unsuitable for surface operations due to residences, golf and recreational use, further complicates Antrim Shale gas development. These conditions are illustrated in Exhibits 1 and 7.

In order to optimally place surface locations, or when the surface is incompatible with surface operations, resulting in the only available surface location being some distance from the geographic area sought to be developed, Petitioner proposes to drill horizontal wells through the subsurface of unleased tracts within the USP Area. Petitioner asserts such wells are necessary so as to access and produce gas from beneath leased but inaccessible tracts of land. Large blocks of leased lands are, in some cases, nearly completely surrounded by unleased tracts (Exhibit 7). Mr. Brock testified that without horizontal well drilling through unleased tracts, the gas beneath such leased tracts may be difficult or impossible to recover.

To explain the conservation and avoidance of waste advantages of drilling through unleased tracts within the USP Area, Mr. Brock compared the benefits of a long horizontal well

as compared to a short horizontal well (Exhibit 9). These benefits include the prevention or minimization of surface waste by fewer surface locations, the prevention of underground waste by greater recoveries of gas, and the recovery of gas that might otherwise not be producible due to the absence of drillable surface locations. Consequently, the ultimate recovery of natural gas can be increased and drilling through unleased tracts will assist in avoiding the drilling of unnecessary wells.

I find that Petitioner's plan to develop the Kearney 29 USP will not cause waste and will help assure that all owners within the USP Area receive their just and reasonable share of the gas. I find that a fair and reasonable Order should not unduly or unnecessarily hamper or defeat the opportunity of those owners who have leased their land to have their natural gas resources developed for their benefit and the benefit of others, including Michigan's energy need for natural gas. The rights of unleased owners are fully respected and protected by the provisions of this Order directing that they will receive the benefits of gas production, by receiving their just and reasonable share of gas production. This Order does not address drilling on the surface or subsurface through formations other than the Antrim Formation of unleased tracts since these issues are not pertinent to the facts in this case.

MCL 324.61513(4) authorizes pooling in the context of "a uniform spacing plan or proration or drilling unit." It also authorizes the pooling of "properties or parts of properties." Administrative Rule R 324.304 refers to the pooling of "tracts or mineral interests." The statute, rules, and Order No. (A) 14-9-94, as amended, do not contain any discussion or analysis expressly limiting the Supervisor's authority to permit operations beneath tracts compulsory pooled into the USP. The Supervisor's regulation of oil and gas drilling and production operations must necessarily take into consideration new and innovative operational techniques. Indeed, MCL 324.61502 directs that the Supervisor's regulation under Part 615 shall ". . . foster the development of the industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production of these natural products." MCL 324.61505 is a broad delegation of jurisdiction and authority to the Supervisor over "all persons and things" necessary to prevent waste and promote the conservation of oil and gas in Michigan. Over time, drilling, completing, and operating techniques change, evolve, and become more sophisticated. The prevention of waste, maximizing production and recoveries, and the protection of correlative rights must be continuously evaluated in view of changes in techniques.

Order No. (A) 14-9-94, as amended, recognizes the benefit of combining multiple 40-acre quarter-quarter sections into large units for the development of Antrim gas projects, to

allow for drilling location flexibility, reduction of the number of surface facilities, and greater flexibility in locating surface locations so as to minimize surface disturbance. I find that the proposed USP and Petitioner's proposal for development are consistent with Part 615 and with Order No. (A) 14-9-94, as amended, and, as such, the Kearney 29 is a proper USP.

II. USP Operator

Mr. McDowell's testimony indicates that the Petitioner owns or controls all of the oil and gas interests in the proposed USP except for approximately 144.859 acres of unleased mineral interests. Given this, the Petitioner seeks to be designated as the operator of the proposed USP. I find, as a Matter of Fact, the Petitioner is eligible to be designated operator of the proposed USP.

III. Compulsory Pooling

As found, the Petitioner has proposed a proper USP for the Antrim Shale Formation but was unable to obtain the agreement of all owners to gain its full control. The Petitioner may not produce a well within a USP without first obtaining the control of all the oil and gas interests. In cases like this, it is necessary for the Petitioner to request compulsory pooling from the Supervisor. As discussed, an owner who does not agree to voluntarily pool his or her interest in a drilling unit may be subject to compulsory pooling. MCL 324.61513(4). The compulsory pooling of an interest must be effectuated in a manner that "will afford to the owner of each tract... the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool" *Id.* In addition to protecting correlative rights, the compulsory pooling must prevent waste. MCL 324.61502. An operator must first seek voluntary pooling of mineral interests within a proposed drilling unit prior to obtaining compulsory pooling through an Order of the Supervisor.

The owners of the 144.859 acres not subject to oil and gas leases owned or controlled by Petitioner are as follows:

<u>Name of Owner/ Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unleased Acres</u>	<u>Net Unleased Acres</u>
Wells Fargo Bank NA	#3 Tr. 9	1.30	1.30
Wells, John S. & Harriet B	#3 Tr. 17	2.506	2.506
Forman, Mark D. & Joyce L.	#3 Tr. 22	2.506	2.506
Heise, Daniel E. & Denise S.	#3 Tr. 24	2.506	2.506
Hermann, Fred K. & Melinda	#3 Tr. 26	2.506	2.506

<u>Name of Owner/ Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unleased Acres</u>	<u>Net Unleased Acres</u>
Douglas, Janice K.	#3 Tr. 32	2.506	2.506
Citizens Bank	#3 Tr. 36	2.506	2.506
Rillema, Kurt & Kristi	#3 Tr. 38	2.506	2.506
Church, Sheldon & Hildegard	#3 Tr. 39	2.506	2.506
Jaskowski, Eric P. & Lisa G.	#3 Tr. 45	2.506	2.506
Slattery, Shawn C. & Gloria J.	#4 Tr. C6	0.459	0.459
Golonka, Lynn M. Trust - LEASED	#4 Tr. C9	----	----
Brown, Cheryl L.	#16 Tr. 23	40.00	13.333
Engle, Barry L.	#16 Tr. 23	40.00	13.333
Braden, Marcia L.	#16 Tr. 23	40.00	13.333
Rathke, Brian & Todd	#1 Tr. 10	9.86	9.86
Tadian, Gary A. & Evelyn J.	#1 Tr. 13	8.0	8.0
Tadian, Gary A. & Evelyn J.	#1 Tr. 15	6.40	6.40
Huntington National Bank	#2 Tr. 5	0.90	0.90
Lange, Joseph A.	#7 Tr. 2	0.175	0.175
Lange, Joseph A.	#7 Tr. 3	-	-
Bent, David & Susan J. - LEASED	#7 Tr. 3	-	-
*Partially leased 2 of 3 undivided mineral interest owners		2.468	0.823
Lange, Joseph A.	#7 Tr. 7	1.61	1.61
Lange, Joseph A.	#7 Tr. 8	3.65	3.65
CH & CS, LLC	#7 Tr. 12	5.166	5.166
DSK Ventures, LLC	#7 Tr. 12-1	0.784	0.784
Faulkner, Elizabeth M. Trust	#5 Tr. 8	0.184	0.184
Faulkner, Elizabeth M. Trust	#5 Tr. 9	0.25	0.25
Bart, Mitchell J.	#14 Tr. 4	-	-
Bart, Michael S.	#14 Tr. 4	-	-
*Partially leased, leased life estate, remainderman interests open		0.64	0.64
Case, Gregory	#14 Tr. 10	10.35	3.45
Bart, Gary Trust	#14 Tr. 17	0.12	0.12
Owen, Donald R. Family Trust	#14 Tr. 18	0.198	0.198

<u>Name of Owner/ Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unleased Acres</u>	<u>Net Unleased Acres</u>
Owen, Donald R. Family Trust	#14 Tr. 19	0.23	0.23
Gardner, Wilber A. Trust	#14 Tr. 20	0.192	0.192
Gardner, Wilber A. & Patricia	#14 Tr. 22	0.92	0.92
Killian, Clifford E. & Joan Trust	#14 Tr. 27	0.488	0.488
Miller, Cynthia <i>et al.</i>	#14 Tr. 28	0.183	0.183
Miller, Cynthia <i>et al.</i>	#14 Tr. 29	0.27	0.27
Fraser, Bruce D. Trust	#8 Tr. 24	0.18	0.09
Fraser, Bruce D. Trust	#8 Tr. 56	9.72	0.19
Northwestern Bank	#13 Tr. 6	2.38	2.38
Northwestern Bank	#13 Tr. 7	1.74	1.74
Northwestern Bank	#13 Tr. 8	1.70	1.70
Northwestern Bank	#13 Tr. 9	0.60	0.60
Northwestern Bank	#13 Tr. 10	0.85	0.85
Troy Plaza, LLC	#13 Tr. 15	0.80	0.80
Hakim, Jamil & Julia	#13 Tr. 18	20.00	10.00
Bannon, Rosemary H. Trust	#13 Tr. 18	20.00	10.00
Sauvola, Wayne J. & Nicole	#13 Tr. CGC 7	13.64	0.426
Izzo, Thomas & Guadalupe	#13 Tr. CGC 8	13.64	0.426
Bank of America	#13 Tr. CGC11	13.64	0.426
Alden State Bank - LEASED	#13 Tr. CGC12	----	----
Nast, Keith D. & Elaine	#13 Tr. CGC15	13.64	0.426
Alden State Bank - LEASED	#13 Tr. CGC18	----	----
Alden State Bank - LEASED	#13 Tr. CGC20	----	----
Thomas, Paul G. & Barbara A.	#26 Tr. VV4	0.50	0.50
Maynor, Ronald & Angela	#26 Tr. VV16	0.50	0.50
Howell, Timothy & Carol	#26 Tr. VV18	0.50	0.50
Ballard-Krishnan, Sharon	#26 Tr. VV 22	0.50	0.50
MacWilliams, Steven & Michelle	#26 Tr. VV23	0.50	0.50

<u>Name of Owner/ Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unleased Acres</u>	<u>Net Unleased Acres</u>
Bayview Financial Property Trust	#26 Tr. VV30	0.50	0.50
Wolvin, Kenneth & Judith	#26 Tr. VV35	0.50	0.50
Youell, Jean H.	#26 Tr. VV37	0.50	0.50
Martin, Norman & Mary	#26 Tr. VV48	0.50	0.50
Ward, George E. & Margaret	#26 Tr. VV50	0.50	0.50
Harmson, Randy G. & Jo G.	#26 Tr. VV52	0.50	0.50
FBT Enterprises, Inc. - Wheel & Rim Supply Co.	#26 Tr. VV53	0.50	0.50
		Total:	144.859

The following banks or lien holders own interests in the leased tracts. They have failed or refused to execute subordination agreements, subordinating their interests to the operative lease, or have refused to ratify the operative lease:

<u>Name of Unratified Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unratified Acres</u>	<u>Net Unratified Acres</u>
Secretary of Housing & Urban Development	#3 Tr. 11	5.18	5.18
Mortgage Electronics Registrations Systems, Inc.	#3 Tr. 11	5.18	5.18
Wells Fargo Bank NA	#3 Tr. 12	11.02	11.02
Huntington National Bank	#3 Tr. 22	2.506	2.506
First of America Bank	#3 Tr. 25	2.506	2.506
Huntington National Bank	#3 Tr. 44	2.506	2.506
Huntington National Bank	#3 Tr. 45	2.506	2.506
Stearns Bank National Bank Association	#3 Tr. 47	17.545	17.545
Antrim County Treasurer	#3 Tr. 47	17.545	17.545
Mortgage Electronics Registrations Systems, Inc.	#4 Tr. 15	0.782	0.782
Alden State Bank	#4 Tr. 16	0.655	0.655
Antrim County Treasurer	#4 Tr. 22	16.1	16.1
Huntington National Bank	#1 Tr. 9	3.87	3.87

<u>Name of Unratified Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unratified Acres</u>	<u>Net Unratified Acres</u>
Antrim County Treasurer	#1 Tr. 9	3.87	3.87
Comerica Bank	#2 Tr. 4	4.62	4.62
Comerica Bank	#7 Tr. 13	3.40	3.40
Alden State Bank	#7 Tr. 3	3.04	3.04
Traverse City Convention & Visitors Bureau	#7 Tr. 3	3.04	3.04
State of MI Dept. of Labor & Economic Growth	#7 Tr. 3	3.04	3.04
Countrywide Home Loans, Inc.	#7 Tr. 6	3.04	3.04
Alden State Bank	#7 Tr. 7	1.61	1.61
Bilby, Kimber	#7 Tr. 7	1.61	1.61
Owens, Virginia Trust	#7 Tr. 7	1.61	1.61
Michigan Department of Treasury - Collections	#7 Tr. 7	1.61	1.61
State of Michigan Dept. of Consumer & Industry Services	#7 Tr. 7	1.61	1.61
United States Dept. of Treasury - IRS	#7 Tr. 7	1.61	1.61
Alden State Bank	#7 Tr. 8	3.65	3.65
Bilby, Kimber A.	#7 Tr. 8	3.65	3.65
Antrim County Treasurer	#7 Tr. 8	3.65	3.65
Owens, Virginia Trust	#7 Tr. 8	3.65	3.65
Michigan Department of Treasury – Collections	#7 Tr. 8	3.65	3.65
State of Michigan Dept. of Consumer & Industry Services	#7 Tr. 8	3.65	3.65
United States Dept. of Treasury - IRS	#7 Tr. 8	3.65	3.65
Alden State Bank	#7 Tr. 12	7.528	7.528
Chemical Bank	#7 Tr. 12-1	0.982	0.982
Mortgage Electronic Registration Systems, Inc.	#14 Tr. 3	0.60	0.60
Household Finance Corp. III	#14 Tr. 3	0.60	0.60
Livingston Financial, LLC	#14 Tr. 15	0.18	0.18

<u>Name of Unratified Mortgagee/Lien Holder</u>	<u>Tract No.</u>	<u>Gross Unratified Acres</u>	<u>Net Unratified Acres</u>
Wells Fargo Bank NA	#8 Tr. 2	2.16	2.16
Citizens Bank	#13 Tr. 1	6.10	6.10
Stearns Bank	#13 Tr. 5	2.491	2.491
Stearns Bank	#13 Tr. 11	30.282	30.282
Mortgage Electronic Registration Systems	#13 Tr. CGC 7	13.64	0.426
Antrim County Treasurer	#13 Tr. CGC25	13.64	0.426
Antrim County Treasurer	#13 Tr. CGC29	13.64	0.426
Antrim County Treasurer	#13 Tr. CGC30	13.64	0.426
Antrim County Treasurer	#13 Tr. CGC31	13.64	0.426
Antrim County Treasurer	#13 Tr. 21	18.57	18.57
Antrim County Treasurer	#13 Tr. 22	19.86	19.86
Citizens bank	#26 Tr. GS3	0.60	0.60
First Bank	#26 GS5	0.60	0.60
Huntington National Bank	#26 Tr. VV10	0.50	0.50
Mortgage Electronic Registration Systems	#26 Tr. VV18	0.50	0.50
Michigan Consumer Lending Department	#26 Tr. VV 25	0.50	0.50
Mcintosh, Maxine L.	#26 Tr. VV30	0.50	0.50
Option One Mortgage Corp.	#26 Tr. VV31	0.50	0.50
Mortgage Electronic Registration Systems	#26 Tr. VV36	0.50	0.50
First Federal of Northern Michigan	#26 Tr. VV41	0.50	0.50
JP Morgan Chase	#26 Tr. VV43	0.50	0.50
HSBC Mortgage Corp.	#26 Tr. VV44	0.50	0.50
FMB-Northwestern Bank	#26 Tr. VV46	0.50	0.50
Huntington National Bank	#26 Tr. VV46	0.50	0.50
Mortgage Electronic Registration Systems	#26 Tr. VV51	0.50	0.50

Petitioner intends to recognize the operative oil and gas lease covering the tracts subject to the above bank mortgages and liens. Petitioner requests that if a mortgage or lien is

foreclosed, the bank or lien holder's interest in that tract will be subject to this compulsory pooling order.

Mr. McDowell testified regarding Petitioner's efforts to negotiate oil and gas leases or ratifications for those tracts identified above (Exhibit 5). His Affidavit of Pooling Efforts indicates that after several verbal and written contacts with the owners, Petitioner has been unable to negotiate oil and gas leases or obtain ratifications. With respect to unleased tracts, Petitioner has offered terms equal to or better than the offers made to other mineral owners in the USP.

In order to invoke the Supervisor's compulsory pooling authority, Petitioner must show that there were efforts made to voluntarily obtain agreement and those efforts failed. Based on the record, I find Petitioner made reasonable, albeit unsuccessful, efforts to obtain agreement.

Based on the foregoing, I find, as a Matter of Fact:

1. The Petitioner was able to voluntarily pool all but approximately 144.859 net mineral acres in the 1,454-acre proposed USP.
2. The Petitioner was unable to obtain subordinations or ratifications from the holders of mortgages or liens identified above.
3. Compulsory pooling is necessary to form a USP, to protect correlative rights, and to prevent waste by preventing the drilling of unnecessary wells.

Now that it has been determined compulsory pooling is necessary and proper in this case, the terms of such pooling must be addressed. When pooling is ordered, the owner (or lessee if subject to a lease) of the compulsorily pooled lands (Pooled Owner) is provided an election on how he or she wishes to share in the costs of the project. R 324.1206(4). A Pooled Owner may participate in the project or, in the alternative, be "carried" by the operator. If the Pooled Owner elects to participate, he or she assumes the economic risks of the project, specifically, by paying his or her proportionate share of the costs or giving bond for the payment. Conversely, if a Pooled Owner elects not to participate, the Pooled Owner is, from an economic perspective "carried" by the operator. Under this option, if the well is a dry hole, the Pooled Owner has no financial obligation because they did not assume any risk. If the well is a producer, the Supervisor considers the risks associated with the proposal and awards the operator compensation, out of production, for assuming all of the economic risks.

In order for a Pooled Owner to decide whether he or she will "participate" in the well or be "carried" by the operator, it is necessary to provide reliable cost estimates. In this regard, the

Petitioner must present proofs on the estimated costs involved in drilling, completing, and equipping the proposed wells.

Mr. Brock submitted an Authorization for Expenditure (AFE) that itemizes the costs to be incurred in the future drilling, completing, equipping, and plugging of a proposed well (Exhibit 10). Mr. Brock's testimony indicates that the costs were based on Petitioner's experience in drilling, completing, and equipping other Antrim wells. The AFE provides that the estimated costs for one well are: \$293,000 for drilling, \$277,000 for completion, and \$163,000 for equipping, for a total cost of \$733,000. (Exhibit 10 erroneously shows the total as \$792,000.)

There is no evidence on this record refuting these estimated costs. I find, as a Matter of Fact, the reduced actual and future estimated costs are reasonable for the purpose of providing the Pooled Owners a basis on which to elect to participate or be carried. However, I find actual costs shall be used in determining the final share of costs and additional compensation assessed against a Pooled Owner.

The next issue is the allocation of these costs. Part 615 requires the allocation to be just and equitable. MCL 324.61513(4). The Petitioner requests the actual well costs and production from the well to be allocated based upon the ratio of the number of net mineral acres in the tracts of the various Pooled Owners to the total number of mineral acres in the USP. Mr. Brock's testimony and Exhibit 12 indicate the USP is underlain by the inferred Antrim Shale Reservoir; and, therefore, allocation on a net mineral acreage basis is fair and equitable. It is Petitioner's intent that the Pooled Owners share in the allocation of costs and production from all wells in the USP.

I find, as a Matter of Fact, a Pooled Owner's share in production and costs should be in proportion to their net mineral acreage in the USP.

The final issue is the additional compensation for risk to be assessed against a Pooled Owner who elects to be carried. The administrative rules under Part 615 provide for the Supervisor to assess appropriate compensation for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of wells. 1996 AACRS, R 324.1206(4)(b). Petitioner requests additional compensation of 200 percent for drilling, 200 percent for completing, and 200 percent for equipping costs for the proposed wells for costs incurred after the effective date of this Order.

Mr. Brock's testimony indicates the presence of a producible Antrim interval can only be proven by the long-term productivity of wells and that the proposed wells have a fair amount of

risk. In addition, due to variations in both the intensity of the local fracture network in the Antrim Shale, which cannot be predicted prior to drilling and completion, and the efficiency of the completion process, a well may not be economical and may not recover the costs of completion and equipping.

Mr. Brock testified that he evaluated the risks associated with drilling, completing, and equipping of Antrim wells in the proposed USP. Exhibit 12 summarizes the variability of Antrim project production levels. Mr. Brock testified that the locations of high, medium, and low production projects are random. There is no specific geographic "trend" of projects with similar production levels. Based on his review of wells drilled on and in the vicinity of the proposed USP, his personal evaluation of the project, and his study of the nature of the Antrim in the proposed USP and vicinity, it was his opinion that the likelihood of successful drilling of future Antrim wells in the proposed USP is relatively high. However, the likelihood of these wells being economically successful depends upon the volume of gas the wells produce. Economic success may not be known for many years. The production of gas from the Antrim is dependent upon the presence of natural fractures that connect to the well bore. Not all Antrim projects, or wells within a project, produce at the same rate because each may not encounter sufficient fracturing. Additionally, some wells in the Antrim project may not produce a sufficient amount of gas to be economical on their own. Mr. Brock testified that the typical risk associated with Antrim operations is that there will be insufficient fracturing necessary to make Antrim wells successful.

Based on the testimony and exhibits submitted in this matter, I find, as a Matter of Fact, the risk of drilling wells in the proposed USP supports compensation from the Pooled Owners of 200 percent of the actual drilling costs incurred. The mechanical and engineering risks associated with the proposed wells supports additional compensation of 200 percent of the actual completing and 200 percent of the actual equipping costs incurred. The additional compensation shall apply to such drilling, completing, and equipping costs as are incurred after the effective date of this Order.

CONCLUSIONS OF LAW

Based on the findings of fact, I conclude, as a matter of law:

1. Petitioner was unable to voluntarily pool the interests of various mineral owners. The Supervisor may compulsorily pool all properties when pooling cannot be agreed

upon. Compulsory pooling is necessary to prevent waste and protect the correlative rights of the owners in the proposed USP. MCL 324.61513(4).

2. This Order is necessary to provide for conditions under which each mineral owner who had not voluntarily agreed to pool all their interest in the pooled unit may share in the working interest share of production. 1996 AACCS, R 324.1206(4).

3. The Petitioner is an owner within the USP and, therefore, eligible to drill and operate wells within the USP. 1996 AACCS, R 324.1206(4).

4. The Supervisor may authorize Petitioner to take from each nonparticipating interest's share of production the cost of drilling, completing, equipping, and operating the wells, plus an additional percentage of the costs as identified in the Determination and Order section of this Order for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of the wells. 1996 AACCS, R 324.1206(4).

5. The applicable spacing for the proposed USP is a well density of no less than 80 acres per well, as established by Order No. (A) 14-9-94, as amended. The basis for determining well density is 1,160 acres.

6. MCL 324.61502 provides in part:

It is accordingly the declared policy of the state to protect the interests of its citizens and landowners from unwarranted waste of gas and oil and to foster the development of the industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production of these natural products. To that end, this part is to be construed liberally to give effect to sound policies of conservation and the prevention of waste and exploitation.

7. MCL 324.61505 provides:

The supervisor has jurisdiction and authority over the administration and enforcement of this part and all matters relating to the prevention of waste and to the conservation of oil and gas in this state. The supervisor also has jurisdiction and control of and over all persons and things necessary or proper to enforce effectively this part and all matters relating to the prevention of waste and the conservation of oil and gas.

8. The Supervisor has jurisdiction over the subject matter and the persons interested therein.
9. Due notice of the time, place, and purpose of the hearing was given as required by law and all interested persons were afforded an opportunity to be heard. 1996 AACRS, R 324.1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and the Conclusions of Law, the Supervisor determines that compulsory pooling to form a 1,454-acre Antrim Shale Formation USP is necessary to protect correlative rights and prevent waste caused by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. A 1,454-acre Antrim Shale Formation USP, referred to as the Kearney 29 USP, is established for the following area:

T30N, R7W, Kearney Township, Antrim County

Section 29: Entire, except NE 1/4 of SE 1/4

Section 30: S 1/2 and E 1/2 of NE 1/4

Section 31: NE 1/4

Section 32: N 1/2

All properties, parts of properties, and interests in this area are pooled into the USP. This pooling is for the purpose of forming a USP only.

2. Each Pooled Owner shall share in all future production and costs in the proportion that their net mineral acreage in the USP bears to the total mineral acreage in the USP.
3. The Petitioner is named Operator of the USP. Within two (2) years from the effective date of this Order, if the Kearney 29 USP is not developed substantially in accordance with the project plan as submitted, the Supervisor may require Petitioner to submit technical data that supports a conclusion that the USP can be adequately drained by the existing development.

4. A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of their interest owned in the USP. The Pooled Owner is considered to hold a $\frac{1}{8}$ royalty interest on their interest owned in the USP, which shall be free of any charge for the costs of drilling, completing, equipping, or operating the proposed wells, or for compensation for the risks of the wells.

5. A Pooled Owner shall have ten (10) days from the effective date of this Order to select one of the following alternatives and advise the Supervisor and the Petitioner, in writing, accordingly:

- a. To participate, then within ten days of making the election, pay to the Operator the Pooled Owner's share of the estimated costs for drilling, completing, and equipping the proposed wells or give bond for the payment of the Pooled Owner's share of such costs promptly upon receipt of an invoice for each proposed well, and authorize the Operator to take from $\frac{7}{8}$ of the Pooled Owner's share of production, the Pooled Owner's share of the actual costs of operating all the wells. The Operator shall invoice the Pooled Owner for its share of the estimated drilling, completing, and equipping costs for each proposed well on or before 30 calendar days prior to the estimated commencement of drilling of each well. The Pooled Owner shall pay the invoice or give bond on or before five (5) calendar days before the estimated drilling commencement date of each well; or
- b. To be carried, then authorize the Operator to take from $\frac{7}{8}$ of the Pooled Owner's share of production:
 - (i) The Pooled Owner's share of the actual cost of drilling, completing, and equipping wells;
 - (ii) An additional 200 percent of the actual drilling costs, 200 percent of the actual completion costs, and 200 percent of the actual equipping costs attributable to the Pooled Owner's share of production as compensation to the Operator for the risk of a dry hole, and the mechanical and

engineering risks associated with the completion and equipping of all future wells; and

- (iii) The Pooled Owner's share of the actual cost of operating the wells.


6. In the event the Pooled Owner does not notify the Supervisor and the Petitioner in writing of the decision within ten (10) days from the effective date of this Order, the Pooled Owner will be deemed to have elected the alternative described in Paragraph 5.b. If a Pooled Owner who elects the alternative in Paragraph 5.a. does not pay their proportionate share of costs or give bond for the payment of such share of such costs, the Pooled Owner shall be deemed to have elected the alternative described in Paragraph 5.b.; and the Operator may proceed to withhold and allocate proceeds for costs from 7/8 of the Pooled Owners' share of production as described in 5.b.(i), (ii), and (iii).

7. In the event a Pooled Owner elects the alternative in Paragraph 5.a. and pays the Operator its share of actual costs and the well is not drilled within 90 days of such payment, the Operator shall refund the payment to the Pooled Owner, unless otherwise agreed to by the Operator and Pooled Owner.

8. For purposes of the Pooled Owners electing alternatives with respect to the nine (9) proposed wells, the amounts of \$293,000 for estimated drilling costs; \$277,000 for estimated completion costs; and \$163,000 for estimated equipping costs are fixed as average well costs for the proposed well. Actual costs shall be used in determining the Pooled Owner's final share of project costs and in determining additional compensation for the risk of the project. If a Pooled Owner has elected the alternative in Paragraph 5.a. and the actual cost exceeds the estimated cost, the Operator may recover the additional cost from 7/8 of the Pooled Owners' share of production. Within 60 days after commencing drilling of the wells, and every 30 days thereafter until all costs of drilling, completing, and equipping the wells and additional compensation are accounted for, the Operator shall provide to the Pooled Owner a detailed statement of actual costs incurred as of the date of the statement and all costs and production proceeds allocated to that Pooled Owner.

9. All Pooled Owners shall receive the following information from the Operator by no later than the effective date of the Order:
 - a. The Order;
 - b. The AFE for the nine (9) presently proposed wells; and
 - c. Each Pooled Owner's share of total costs for drilling, completing, equipping, and operating the proposed wells if the Pooled Owner were to choose option "a" in Paragraph 5, above; and
10. The Supervisor retains jurisdiction in this matter. Any amendments to the USP boundary shall be by Order of the Supervisor after notice to all interested parties.
11. The effective date of this Order is Mar. 4, 2011.

DATED: Feb. 22, 2011


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